

Title (en)  
REDOX FLOW BATTERY

Title (de)  
REDOX-FLOW-BATTERIE

Title (fr)  
BATTERIE À FLUX RÉDOX

Publication  
**EP 3719905 A4 20201223 (EN)**

Application  
**EP 17875070 A 20171128**

Priority  
JP 2017042652 W 20171128

Abstract (en)  
[origin: US2019237780A1] A redox flow battery includes a battery cell; a positive electrolyte tank and a negative electrolyte tank configured to store therein a positive electrolyte and a negative electrolyte, respectively; a positive electrolyte circulation path and a negative electrolyte circulation path each configured to allow a corresponding one of the electrolytes to circulate between a corresponding one of the tanks and the battery cell; and a communicating tube including a tube immersed at one open end thereof in the positive electrolyte, stretched at an intermediate portion thereof above levels of both the electrolytes, and immersed at the other open end thereof in the negative electrolyte.

IPC 8 full level  
**H01M 8/18** (2006.01); **H01M 8/04082** (2016.01); **H01M 8/04186** (2016.01)

CPC (source: EP KR US)  
**H01M 8/04082** (2013.01 - EP US); **H01M 8/04186** (2013.01 - EP KR US); **H01M 8/04201** (2013.01 - KR US); **H01M 8/04276** (2013.01 - KR);  
**H01M 8/04753** (2013.01 - US); **H01M 8/188** (2013.01 - EP KR US); **Y02E 60/50** (2013.01 - EP)

Citation (search report)  
• [X] WO 2008111946 A1 20080918 - VRB POWER SYSTEMS INC [CA], et al  
• [X] JP 2013025964 A 20130204 - SUMITOMO ELECTRIC INDUSTRIES  
• [A] EP 2541660 A1 20130102 - SUMITOMO ELECTRIC INDUSTRIES [JP]  
• See also references of WO 2019106723A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 11081708 B2 20210803; US 2019237780 A1 20190801**; AU 2017366666 A1 20190613; CN 110100342 A 20190806;  
EP 3719905 A1 20201007; EP 3719905 A4 20201223; JP 6931467 B2 20210908; JP WO2019106723 A1 20201008;  
KR 102381015 B1 20220401; KR 20200086757 A 20200720; TW 201931655 A 20190801; TW I788429 B 20230101;  
US 2021328242 A1 20211021; WO 2019106723 A1 20190606

DOCDB simple family (application)  
**US 201716060286 A 20171128**; AU 2017366666 A 20171128; CN 201780004505 A 20171128; EP 17875070 A 20171128;  
JP 2017042652 W 20171128; JP 2018521444 A 20171128; KR 20187016570 A 20171128; TW 107135247 A 20181005;  
US 202117362490 A 20210629